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October 25, 2004

TO: Each Supervisor

FROM: Thomas L. Garthwaite, M.D.
Director and Chief Medical Officer

Jonathan E. Fielding, M.D., M.P.H.
Public Health Director and Health Officer

SUBJECT: **WESTNILE VIRUS ACTIVITY SUMMARY REPORT #4**

On April 27, 2004, the Board approved a motion by Supervisor Michael D. Antonovich, directing the Directors of Health Services and Public Health, to implement the Department's planned West Nile Virus (WNV) awareness and surveillance program and to provide monthly updates. This is our fourth update and encompasses WNV surveillance findings up to October 14, 2004.

BACKGROUND

Because of its surprisingly rapid spread across the nation, as well as its considerable and increasing morbidity and mortality, WNV is a disease of significant public health importance. Over the course of a few short years, the virus has become established in nearly all of the contiguous United States and its rising human toll is alarming. Nationwide, the incidence of WNV disease soared from 66 confirmed cases and 9 deaths in 2001 to nearly 10,000 cases and 262 deaths in 2003. In 2002, the first locally acquired human case of WNV in California was identified in our county, and last season one case of WNV fever was acquired in Los Angeles County (LAC).

LOS ANGELES COUNTY WNV SURVEILLANCE ACTIVITIES—2004

Since WNV was made a reportable disease as of July 1, 2004, commercial laboratories, clinicians, and hospitals have been reporting WNV cases and positive results. WNV surveillance in Los Angeles County includes the reporting of human and animal cases of this disease. To enhance timely human disease identification and enact localized prevention efforts to limit additional cases, laboratory documented WNV infection was added to the list of mandated reportable diseases and conditions in LAC (California Code of Regulations, Title 17, Sections 2503 and 2505). Physicians and laboratories must report patients with a positive WNV test to DHS within one (1) working day.

As of October 14, 2004, 275 symptomatic cases of WNV infection and 23 cases in asymptomatic blood donors have been confirmed in 2004 (Attachment 1). The WNV cases include: 116 WNV fever cases, 75 meningitis cases, 39 encephalitis cases, and four cases of acute flaccid paralysis (AFP). One hundred and seventy-seven cases are males (ages 5-93 years) and ninety-eight cases are female (ages 6-91 years). There were 9 cases in children under 18 years of age with no deaths.

The median age of patients with WNV fever is 51 years (6-91 years) and 58 years (5-91 years) for individuals with WNV neuro-invasive disease (meningitis, encephalitis, or AFP). Since the first WNV-associated fatality on August 6, 2004, seven additional fatalities have occurred in LAC. The eight fatalities have a median age of 67.5 years (59-91 years). WNV cases continue to be distributed primarily in the San Gabriel Valley (101 cases) followed by cases in East LA County (71 cases), San Fernando Valley (69 cases), Metropolitan LA (7 cases), South Bay (8 cases), South LA (5 cases); residence status is unknown in 8 cases. As seen in the attachment, it appears that human WNV activity peaked in early to mid-August. However, it is expected that human WNV cases will continue to occur through the month of October.

In addition to human WNV cases, WNV positive dead birds, mosquito pools, and sentinel chickens continue to be identified. As of October 14, 2004, over 800 WNV-positive dead birds have been identified in LAC, just over twenty-five percent of the number of infected birds identified for the entire state (2,922 birds). WNV is now established throughout the county, so dead bird collection by the Health Department was discontinued in most areas. However, telephoned reports of dead birds will continue to be taken since these reports provide an on-going indicator of presumed WNV activity and help focus mosquito containment activities.

VECTOR CONTROL

Since mosquitoes serve as vectors for disease transmission, WNV-positive mosquito pools are another critical environmental indicator; as such, mosquito pools are routinely tested for the presence of WNV. As of October 14, 2004, 384 pools have tested positive in LAC, nearly one-third of the identified positive mosquito pools in California (1,074 pools).

In an effort to help protect the public health from the threat of WNV disease, the Department funded a one year agreement with local mosquito and vector control districts to provide mosquito abatement services to all areas of the county not currently within the jurisdiction of a control district. At least 186,000 persons reside in such regions. In July 2004, city managers in La Cañada, South Pasadena, and Baldwin Park—cities without mosquito control programs—were notified that the County would provide temporary mosquito abatement services by contracting with the San Gabriel Valley Mosquito and Vector Control District for fiscal year 2004-2005. Because portions of the cities of Palmdale and Lancaster as well as unincorporated Antelope Valley and Santa Clarita Valley regions are also without abatement services, we entered into a similar one-year agreement with the Antelope Valley Mosquito and Vector Control District to provide abatement and surveillance service, pending a permanent solution.

EDUCATIONAL EFFORTS

In anticipation of human WNV cases, LAC DHS mailed out over 34,000 WNV informational compact discs to healthcare professionals throughout Los Angeles County in June 2004. Department staff have conducted training on WNV for various governmental agencies, including LAC Departments of

Parks and Recreation, Agricultural Commissioner/Weights and Measures, and Public Works, as well as the United States Forest Service and the Los Angeles City Department of Recreation and Parks.

On August 10, 2004, a letter was sent to all City Mayors in informing them of resources available to them through DHS. In addition, we have trained over 100 LAC DHS staff to use a comprehensive WNV presentation curriculum. Staff were available to make presentations to city councils, and other community agencies and groups, arranged through the appropriate DHS Area Health Office (Attachment 2).

For public use, LAC DHS established a toll free telephone number with information in five languages (1-800-975-4448). A website (<http://lapublichealth.org/acd/VectorWestNile.htm>) is maintained with updated WNV information, resources, and downloadable materials such as: a one page low literacy flyer in English and Spanish; a 16-page Mosquito Control booklet in English and Spanish; periodic WNV Activity Summaries which reflect current statistics; and links to various related resources such as the mosquito and vector control abatement districts and the Centers for Disease Control and Prevention.

Utilizing bioterrorism grant funding, personal individual packets of 10% DEET, a mosquito repellant, were purchased and delivered to the Area Health Offices and distributed within their communities. On August 19, 2004, a press conference took place in the City of El Monte in a senior center and included the distribution of donated DEET samples from various manufacturers.

Educational activities in September included the participation of an ACDC Health Educator at the LA County Fair promoting WNV Prevention Awareness through distribution and discussion of community and individual WNV prevention activities. A second seasonal mailing of WNV information booklets was distributed to libraries, parks, and recreational centers.

CONCLUSION

It is likely that human WNV cases will occur throughout October 2004. Accordingly, surveillance and public education activities will continue.

We will provide a final report on this WNV season in January, 2005. In the meantime if you have any questions or need additional information, please let either of us know.

TLG:JEF:sc
404:015

Attachments

c: Chief Administrative Office
County Counsel
Executive Officer, Board of Supervisors



WEST NILE VIRUS: Weekly Epidemiology Report (Week 41 - Ending October 14, 2004)

West Nile Virus Case Characteristics Los Angeles County, 2004¹

	Total #	Information Unknown ²	Clinical Presentation						Demographics	
			Blood Donor	WN Fever	Neuro-invasive	Neuroinvasive Diagnosis	Hospitalized ³	Deaths	Gender (M / F)	Median Age (range)
Cases confirmed WEEK 41 ^{4,5}	9	8	0	0	1	0 = Encephalitis 1 = Meningitis 0 = Acute Flaccid Paralysis	1	0	3 / 6	54 yrs (24-77 yrs)
Cases confirmed WEEK 40 ^{4,6}	20	3	1	11	5	2 = Encephalitis 3 = Meningitis 0 = Acute Flaccid Paralysis	10	0	14 / 6	53 yrs (11-93 yrs)
TOTAL to date⁷	275	18	23	116	118	39 = Encephalitis 75 = Meningitis 4 = Acute Flaccid Paralysis	168	8	177 / 98	54 yrs (5-93 yrs)

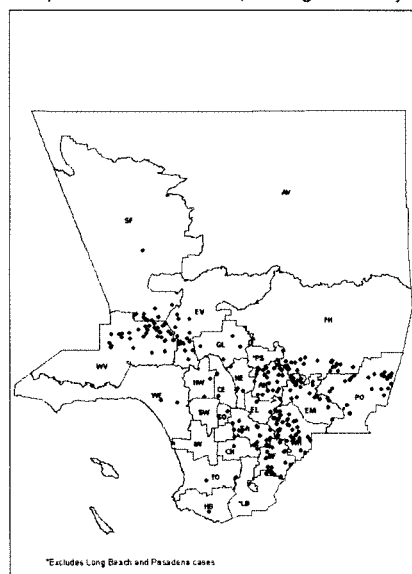
1. Excludes cases in Long Beach and Pasadena. Totals are provisional and subject to change.
2. Cases reported positive by State DHS, but clinical and demographic information is excluded or pending.
3. Hospitalized at time of diagnosis and may not reflect current clinical status.
4. The week of case confirmation does not necessarily reflect the week of illness onset. On average, LAC WNV cases are confirmed 21 days after illness onset.
5. Total as of Thursday 10/14/04, 3pm; week 41 reflects cases confirmed during reporting period 10/08/04-10/14/04.
6. Total as of Thursday 10/07/04, 3pm; week 40 reflects cases confirmed during reporting period 10/01/04-10/07/04.
7. Cumulative case total as of Thursday 10/14/04, 3pm.

West Nile Virus: Case Count by Service Planning Area (SPA) Los Angeles County, 2004

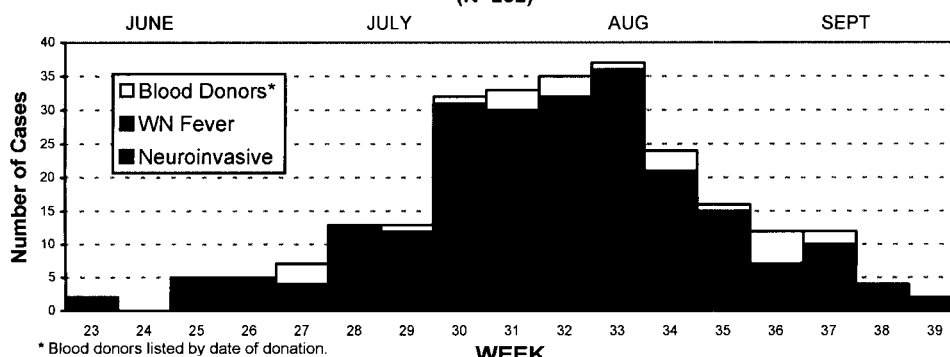
LOCATION	Cases confirmed this week WEEK 41 ^{2,3}	Cases confirmed last week WEEK 40 ^{2,4}	TOTAL to date ⁶
SPA 1: Antelope Valley	0	0	0
SPA 2: San Fernando	2	11	69
SPA 3: San Gabriel	2	3	101
SPA 4: Metro	1	1	7
SPA 5: West	0	0	2
SPA 6: South	0	0	5
SPA 7: East	2	5	71
SPA 8: South Bay	0	0	3
Residence Unknown ⁵	2	0	8
TOTAL	9	20	266

1. Totals are provisional and subject to change.
2. The week of case confirmation does not necessarily reflect the week of illness onset. On average, LAC WNV cases are confirmed 21 days after illness onset.
3. Total as of Thursday 10/14/04, 3pm; week 41 reflects cases confirmed during reporting period 10/08/04-10/14/04.
4. Total as of Thursday 10/07/04, 3pm; week 40 reflects cases confirmed during reporting period 10/01/04-10/07/04.
5. Demographic information is excluded or pending.
6. Cumulative case total as of Thursday 10/14/04, 3pm.

Human WNV Cases (N=251), 10/07/2004
Department of Public Health, Los Angeles County



West Nile Disease Cases by Week of Symptom Onset Los Angeles County, 10/14/04 (N=252)**



DEAD BIRD SURVEILLANCE AND COLLECTION

SURVEILLANCE

The County Health Department is still interested in phone reports of dead birds since this surveillance provides an ongoing indication of presumed viral activity in an area and help focus containment efforts.

Dead birds can be reported by calling (877) 747 - 2243

COLLECTION AND TESTING

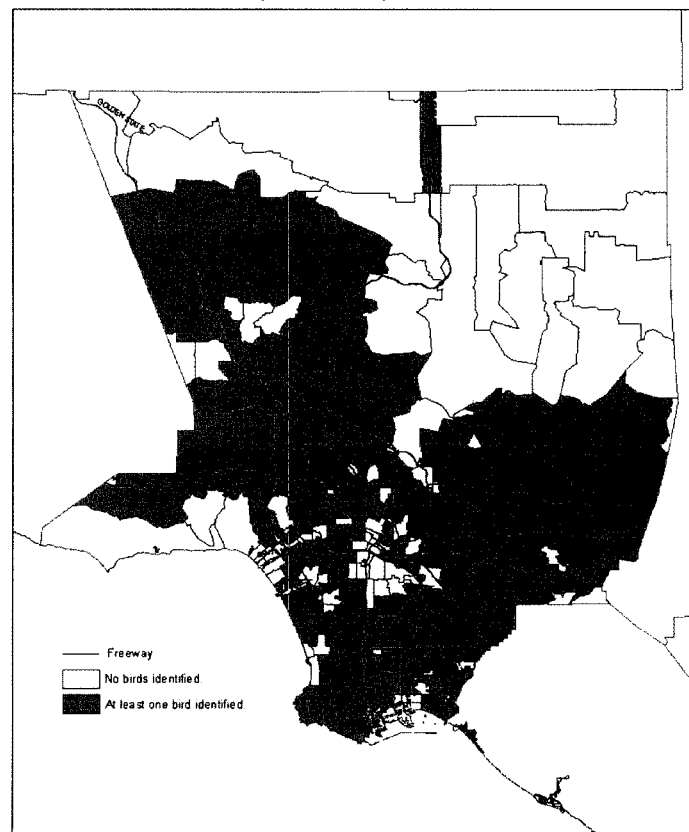
Collection and testing of dead birds will continue in ZIP code areas that have not had a previous positive test (see table). In addition the county is cooperating with a statewide study to collect birds from additional selected ZIP codes marked by an '*'

ZIP code areas where dead bird collection are still active. (10/14/04)								
90001	90048	90254	90405	90743	91126	91502	92648	93536
90003	90056	90255	90502 *	90744 *	91201 *	91521	92649	93543
90006	90057	90260	90506	90745 *	91202	91522	92683	93544
90007	90058	90261	90601 *	90747	91203 *	91523	92801	93550
90010	90062	90263	90620	90755	91204 *	91608	92805	93551
90011	90063	90265	90621	90802	91205	91709	92821	93552
90013	90067	90270	90623	90813	91210	91710	92823	93553
90014	90068 *	90272	90630	90822	91316 *	91733 *	92831	93560
90015	90071	90277	90639	90831	91320	91745 *	92832	93563
90017	90073	90278	90640 *	90840	91350	91748 *	92833	93591
90025	90077	90290	90660 *	90846	91351	91759	92835	
90026	90089	90291	90704	91011	91354	91762	92886	
90027 *	90094	90301	90710	91020	91362	91763	93225	
90031	90095	90304	90715	91023	91381	91784	93243	
90037	90210	90401	90731 *	91046	91382	91786	93510	
90038	90211	90402	90732 *	91101	91403 *	91792	93523	
90039 *	90212	90403	90740	91103	91411 *	92397	93532	
90040	90230	90404	90742	91125	91436 *	92647	93535	

West Nile virus-infected dead birds:

WNV-infected dead birds have been recovered from nearly all areas of Los Angeles County.

**Dead Birds Identified with West Nile Virus by ZIP Code
Los Angeles County, 10/14/2004**



To request a speaker from the Los Angeles County Department of Health Services Speakers Bureau on West Nile virus, please contact your Area Health Officer.¹

Area Health Officer for SPA 1 and 2 (Antelope Valley and San Fernando Areas):

Deborah Davenport, RN, MS
818 487-0148
818 487-0110 fax
5300 Tujunga Avenue
North Hollywood, CA 91601

Area Health Officer for SPA 3 and 4 (San Gabriel and Metro Areas):

M. Ricardo Calderon, MPH
213 240-8043
213 202-6096 Fax
241 N. Figueroa Street #312A
Los Angeles, CA 90012

Area Health Officer for SPA 5 and 6 (West and South Areas):

Martina Travis, RN
323 563-4093
323 249-1591
1522 E. 102nd Street
Los Angeles, CA 90002

Area Health Officer for SPA 7 and 8 (East and South Bay/Long Beach Areas):

Erica Watson, MD, MPH
562 464-5408
562-698-8857 Fax
7643 S. Painter Avenue
Whittier, CA 90602

¹ To determine the Area Health Officer for your city please visit <http://lapublichealth.org/spa/spamap.htm>